

# **ENTREPRENEURIAL NETWORK DEVELOPMENT AS A SIGN OF BUSINESS EMERGENCE**

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## Abstract

This study aims to explain the entrepreneurial processes as developments of entrepreneurial networks. As a theoretical framework, this study adopts the theory of experimentally organized economy and competence blocs. As suggested by this theory, entrepreneurs select profitable innovations and commercialise them. Through logistic regressions on the subjective and objective dependent variables, we find that nascent firms' various activities to network customers, innovators, investors, and employees are positively associated with the business emergence. This study identifies the roles of entrepreneurs and the other actors in the entrepreneurial processes.

## 1. Introduction

It is essential for entrepreneurship researchers to explain the emergence processes of new business ventures effectively. Research interests in entrepreneurial processes distinguish entrepreneurship research from organization studies. Until now, hundreds of the studies on the entrepreneurial processes have been performed, but their models of entrepreneurial processes for business ventures are highly fragmented and are insufficient for understanding the processes (Moroz & Hindle, 2012). The models on the entrepreneurial processes are can be classified into two perspectives, i.e. "static stages theory" and "dynamic states approach" (c.f. Levie & Lichtenstein, 2010). In the static theory, the entrepreneurial processes are divided into several stages and ordered tasks while in the dynamic approach, the processes regarded as temporal and complex phenomena. To explain the temporal and complex phenomena effectively, the concept of "simple sign" is useful. We define simple sign as an effective index of one's progress in a certain process. As an example of simple sign, Dimov (2010) argues that opportunity confidence positively affects venture emergence.

Based on the dynamic perspective, this study aims to explain the entrepreneurial processes as developments of entrepreneurial networks. In the present study, the development of entrepreneurial network is a simple sign of an entrepreneurial process. As a theoretical framework, this study adopts the theory of experimentally organized economy (EOE) and competence blocs. In the theory of EOE and competence blocs, the competence blocs are minimum sets of actors and their roles required to engender new economic combinations, and a firm is described as a team with the required competences (Johansson, 2010). Thus, we conjecture that an entrepreneur's networking activities gathering the required competences are associated with the emergence of a business. Furthermore, the bridging and bonding social capital is a robust predictor for advancing through the start-up process (Davidsson & Honig, 2003). Thus it is promising to explain the entrepreneurial processes as developments of

entrepreneurial networks based on a theoretical framework.

Through this approach, the present study contributes to entrepreneurship research in several ways. 1) This study explains the business emergences by entrepreneurial network developments through a dynamic approach. 2) This study adopts the theory of EOE and competence blocs which has potential within entrepreneurship research. 3) This study identifies the roles of entrepreneurs and the other actors in the entrepreneurial processes, which are essential to conduct entrepreneurship studies from a multi-actor perspective.

## 2. Theory and hypotheses

In the present study, we adopt the theory of EOE and competence blocs. This theory has potential to explain the entrepreneurial phenomena effectively, although this has rarely been adopted in entrepreneurship research. As a part of this theory, the EOE carries the assumption that all economic actors are boundedly rational, and their activities are experimental in nature, because, in the contemporary environment of immense information, they cannot predict the results of their activity with any confidence. As the other part of this theory, the competence blocs are the minimum sets of actors and their roles required to engender new economic combinations in the EOE (Johansson, 2010).

The competence bloc is composed of the competencies necessary to generate, identify, select, expand and exploit profitable new combinations in the state space. We can categorize the competencies and the actors according to their function, though we cannot specify exactly the content of the competencies. As a main actor in the competence bloc, *entrepreneurs* select profitable innovations and commercialise them. The entrepreneur has the most critical function since he understands, selects and initiates the commercialization of the innovations, other important actors and their roles are listed below (Carlsson and Eliasson, 2003; Johansson, 2010).

- ✧ *The competent customer takes an active part in the development and the commercialization of products. The competent customer serves as a channel of information and informs the firm about the market and specific customer demands. He acts as a catalyst for innovation and has a decisive influence on the development and final design of new products.*

Thus nascent firms' various activities to link the competence customers may be positively associated with the business emergence.

**Hypothesis 1-1.** "Marketing efforts undertaken" is positively associated with the business emergence.

**Hypothesis 1-2.** "Contact with potential customers" is positively associated with the business emergence.

- ✧ *Inventors find new combinations that solve specific economic, organizational and technical problems; Innovators integrate different technologies for what is needed for particular product functions. He solves advanced technological problems and puts large-scale technologies together into technically advanced products. The function of an innovator can be carried out by one person or a group of persons.*

Thus nascent firm's various activities to obtain the innovative products or technologies may be positively associated with the business emergence.

**Hypothesis 2-1.** "Business product, responsibility for product development" is positively associated with the business emergence.

**Hypothesis 2-2.** "Patent, copyright or trademark application" is positively associated with the business emergence.

- ✧ *Competent venture capitalists recognize and finance viable business opportunities, identified, organized and presented to them by the entrepreneurs. This task includes an assessment of the competence of the entrepreneur as well as that of other managers of the venture. The venture capitalist provides competent money. That is, he provides financial resources bundled with his management competence, personal networks and experience. However, the main task of the venture capitalist is to recognize and correctly price innovations.*

Thus nascent firm's various activities to gain capital may be positively associated with the business emergence.

**Hypothesis 3-1.** "Financial projections developed" is positively associated with the business emergence.

**Hypothesis 3-2.** "Financial institution funding received" is positively associated with the business emergence.

- ✧ *Skilled labour carries out production. This includes white-collar as well as blue-collar workers.*

Thus nascent firm's activities to retain employees may be positively associated with the business emergence.

**Hypothesis 4.** "Employees working for business" is positively associated with the business emergence.

### 3. Methodology

This study used a longitudinal random panel dataset of 731 nascent firms from the Comprehensive Australian Study of Entrepreneurial Emergence (CAUSEE) project conducted

by Australian Centre for Entrepreneurship Research between 2007 and 2011. The CAUSEE dataset encompasses gestation activities of nascent firms. Among these gestation activities, the above-mentioned activities of nascent firms are included. Logistic regression analyses were performed to confirm the gestation activities influencing the emergence of a business. As dependent variables, objective as well as subjective variables were used, as the objective dependent variable “Revenue exceeding expenses at a monthly base, past 6 of 12 months” was adopted, and as the subjective dependent variable “Status of venture - nascent” was adopted (Australian Centre for Entrepreneurship Research, 2012).

#### 4. Results

Table 1: Logistic regressions of business emergence

	Subjective dependent variable: “Perceived Status of nascent venture: Operational”	Objective dependent variable: “Revenue exceeding expenses at a monthly base, past 6 of 12 months”
	B	B
H1-1. “Marketing efforts undertaken”	1.221***	.976***
H1-2. “Contact with potential customers”	.133	.693
H2-1. “Business product ... development”	1.244***	.967***
H2-2. “Patent, copyright ... application”	1.340***	1.004**
H3-1. “Financial projections developed”	.908***	.581*
H3-2. “Financial institution funding received”	.505*	.246
H4. “Employees working for business”	1.278***	1.056***
Nagelkerke Pseudo R <sup>2</sup>	.364	.257

\* A significant coefficient at the .05 level.

\*\* A significant coefficient at the .01 level.

\*\*\* A significant coefficient at the .001 level.

The results of the logistic regressions of the business emergence are presented in Table 1. The hypotheses of H1-1 (“Marketing efforts”), H2-1 (“Product development”), H2-2 (“Patent application”), H3-1 (“Financial projections developed”), and H4 (“Employees working”) are significant for both subjective and objective dependent variables. However, H3-2 (“Financial institution funding received”) is significant only for the subjective (perceived) dependent variable. This result shows that nascent entrepreneurs tend to think their firm is “operational” when they have received an external funding regardless the profit of their business. Unlike our expectation, H1-2 (“Contact with potential customers”) is not significant for both dependent variables. This result shows that the simple relations with the potential customers are not so meaningful for business emergence.

## 5. Discussion and Conclusion

We perform this study to explain the entrepreneurial processes as developments of entrepreneurial networks based on the dynamic complexity perspective. One of the previous frameworks on the entrepreneurial processes was the concept of “organization emergence” (Katz & Gartner, 1998), but, according to GEM global report, more than a half of nascent entrepreneurs do not intend to build an organization (Kelley, Singer, & Herrington, 2012). Therefore, as suggested in this paper, the concept of network development to build a competence team can be a more appropriate concept explaining the entrepreneurial processes for business venturing, and this concept can be a good sign of emergence of a business venture.

Lichtenstein et al. (2007) argues that certain dynamic patterns in start-up activities lead to the emergence of new firms when the rate of start-up activities is high, start-up activities are spread out over time, and start-up activities are concentrated later rather than earlier. In this context, the dynamic pattern of the confirmed networking activities should also be considered in a further study.

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